Case 3315

Eudendrium tenellum Allman, 1877 (Cnidaria, Hydrozoa): proposed conservation of usage of the specific name by the designation of a neotype

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Abstract. The purpose of this application, under Article 75.5 of the Code, is to conserve the specific name *Eudendrium tenellum* Allman, 1877 in its accustomed usage for a small, distinctive, and widely distributed marine hydroid (family EUDENDRIIDAE) from North America, Europe and Japan. This name has been widely used for this hydroid since 1899, but Allman's (1877) type material of *E. tenellum* lacks both hydranths and gonophores, essential for specific identification within the genus *Eudendrium*, and is possibly conspecific with *E. capillare* Alder, 1856, while the species *E. tenellum* is unrecognizable from its original description. It is proposed that all previous type fixations for *Eudendrium tenellum* Allman, 1877 are set aside and a neotype designated in accordance with Hirohito's (1988) description of *Eudendrium tenellum*.

Keywords. Nomenclature; taxonomy; Hydrozoa; EUDENDRIIDAE; *Eudendrium*; *Eudendrium tenellum*; *Eudendrium capillare*; hydroids.

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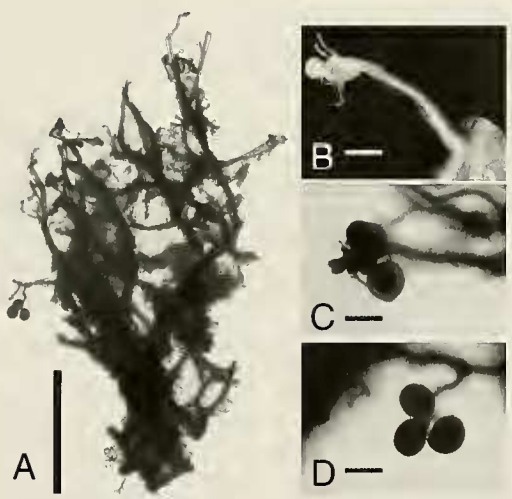
1. Allman (1877, p. 8, pl. 4, figs. 3–4) established the name *Eudendrium tenellum* for a colonial hydroid collected at a depth of 862 m off Double-Headed Shot Key (Florida, U.S.A). The type material studied by Allman, lacking hydranths and gonophores, is deposited in the collection of the Museum of Comparative Zoology at Harvard University (a jar labelled 'MCZ 50235; colony without gonophores, U.S.A., off Florida, off Double-Head Shot Key, Gulf Stream Expedition, 23°57′30″N, 80°29′15″W, alcohol preserved, 10.iii.1869, 862 m, leg. L.F. de Pourtalès, det. G.J. Allman, holotype, with no hydranths'). Allman (1877, p. 8) himself had doubts about the identity of this hydroid, remarking that 'its reference to this genus is probably correct, but as neither hydranths nor gonophores were present in the specimen, it may possibly have its true place in some other'.

2. Although the description provided by Allman (1877) was entirely inadequate for recognition of *E. tenellum*, many authors subsequently used this name for a small and

distinctive species of hydroid (e.g. Bonnevie, 1899a, pp. 7–8, 1899b, pp. 49–50; Stechow, 1923, p. 80; Fraser, 1937, p. 43, pl. 8, fig. 33, 1944, pp. 74–75, pl. 12, fig. 50, 1948, pp. 183, 198; Kramp, 1943, pp. 16, 43; Yamada, 1954, p. 127, text-fig. 15, 1959, p. 26; Calder, 1972, p. 226, pl. 2, fig. 6; Hirohito, 1977, pp. 12–13, text-fig. 3, 1988, p. 88, fig. 31d-h). *Eudendrium tenellum* auct. is recognizable from the morphology of its hydranths and gonophores (Calder, 1972; Hirohito, 1977) and from its complement of nematocysts or cnidome (Hirohito, 1988). The presence of these characters and their nature is now considered critical for the differentiation of species assigned to the family EUDENDRIIDAE (Marques et al., 2000a, 2000b; Marques, 2001).

3. At present two distinctive species are cited in the literature under the name *Eudendrium tenellum* Allman, 1877. Colonies of both *Eudendrium tenellum* Allman, 1877 and *E. tenellum* auct. resemble those of *Eudendrium capillare* Alder, 1856. Naumov (1960, p. 244), and later Christiansen (1972, p. 290), regarded *E. tenellum* as a junior synonym of *E. capillare*. Contrary opinions were expressed by Calder (1972, p. 226) and Hirohito (1977, p. 13), who considered *E. tenellum* auct. distinct in having smaller and less-branched colonies, and in possessing gonophores on complete rather than atrophied hydranths (Calder, 1988, p. 43).

4. As part of studies on the genus *Eudendrium*, we recently examined the type material of *E. tenellum* described by Allman (1877). The cnidome, from an examination of scarce coenosarc material, was found to comprise small microbasic euryteles as in *E. capillare*. On the other hand, the study of Hirohito's (1988) material of *E. tenellum* auct. (the female colonies numbered 1078 (Japan, Samejima, Hayama, 11.vi.1934)) revealed the presence of macrobasic euryteles, 20–27 × 7–10 μm. Therefore, while the identity of *Eudendrium tenellum* Allman, 1877 remains in doubt, we consider it possibly conspecific with *Eudendrium capillare* Alder, 1856 and clearly different from *Eudendrium tenellum* auct., a well-known hydroid with widespread distribution.



Proposed neotype of *Eudendrium tenellum* Allman, 1877. A. One fascicled colony; B. Hydranth; C. Immature female gonophores; D. Mature female gonophores. (Scale bars: A=2 mm; B,C,D= 200 microns).

5. In order to conserve the specific name *Eudendrium tenellum* in its accustomed use, we propose that all previous type fixations for *E. tenellum* Allman, 1877 are set aside and that a neotype consistent with common usage is designated; a suitable specimen as the neotype would be a colony from a jar labelled 1078 (Japan, Samejima, Hayama, 11.vi.1934, no depth, alcohol preserved, det. Hirohito; to be deposited in the collection of the United States National Museum, Washington D.C.) described by Hirohito (1988).

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to set aside all previous type fixations for the nominal species *Eudendrium tenellum* Allman, 1877 and to designate specimen 1078 described by Hirohito (1988) as the neotype;

(2) to place on the Official List of Specific Names in Zoology the name *tenellum* Allman, 1877, as published in the binomen *Eudendrium tenellum* and as defined by the neotype designated in (1) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).